

Split Dataframe by School Code and Get Age Statistics

Aim

Write a Pandas program to split the following dataframe by school code and get mean, min, and max value of age for each school.

Algorithm

1. Create a DataFrame with the given sample data
2. Group the DataFrame by the 'school_code' column
3. Apply aggregation functions (mean, min, max) to the 'age' column for each group
4. Display the resulting statistics

Code

```
import pandas as pd

data = {
    'school_code': ['s001', 's002', 's001', 's002', 's001', 's001', 's002', 's002'],
    'class': ['V', 'V', 'VI', 'VI', 'VI', 'VII', 'VII', 'VIII'],
    'name': ['Alberto Franco', 'Gino Mcneill', 'Ryan Parkes', 'Eesha Hinton', 'Gino Mcneill', 'David Parkes', 'Alberto Franco', 'Eesha Hinton'],
    'age': [12, 12, 13, 13, 13, 14, 14, 15]
}

df = pd.DataFrame(data)

result = df.groupby('school_code')['age'].agg(['mean', 'min', 'max'])
print(result)
```

Output

school_code	mean	min	max
s001	13.0	12	14
s002	13.5	12	15

Result

The program successfully splits the dataframe by school code and calculates the mean, minimum, and maximum age for each school. The output shows that school s001 has a mean age of 13.0, with a minimum of 12 and a maximum of 14. School s002 has a mean age of 13.5, with a minimum of 12 and a maximum of 15.